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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/716,199

11/17/2003

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EXAMINER

DURNFORD-GESZVAIN, DILLON

ART UNIT

PAPER NUMBER

2622

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/716,199	<b>Applicant(s)</b> KOIZUMI ET AL.	
	<b>Examiner</b> Dillon Durnford-Geszvain	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims **1, 2, 4-6** and **8-11** are pending, claims **1, 4-6** and **8-11** are amended, and claims **3** and **7** are cancelled.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims **1, 2, 4-6** and **9-11** have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims **1, 2, 4-6** and **8-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,249,317 (Hashimoto) in view of US 2003/0161506 (Velazquez).

5. As to claim **1**, Hashimoto teaches an image processing method for processing an image using image data produced by an image producing device (see Fig. 3), and image production record information which includes at least information relating to shooting conditions at the time of production of the image data (see C5 L54-67 and note that it at least records the amount of high saturation pixels of each color and the number of skin-colored pixels), and which is associated with the image data, the method comprising:

performing color balance adjustment processing of the image data (C6 L56 to C7

L17), wherein the performing includes:

determining differences of respective color components of pixels that have colors close to a present memory color (skin colored portions) from the respective color components of a preset target color in the image data by analyzing the image data; and  
adjusting a processing amount of the color balance adjustment processing in accordance with the differences, the adjusting includes adjusting a proportion of the processing amount of the color balance adjustment processing with respect to the differences (C7 L9-17).

What Hashimoto does not explicitly teach is storing a distance to a subject and using said distance to adjust a proportion of processing amount of the color balance adjustment. However, Velazquez teaches storing subject distance as metadata ([0013] and [0017]) and using this information to determine the size that a face should be if it is close or far away from the camera ([0027]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have stored the distance to a subject as metadata and used this information to estimate face size in Hashimoto as this would allow the camera to determine if a skin colored portion in an image is actually skin and this would allow for more precise white balance control than can be achieved with the system of Hashimoto alone.

6. As to claim **2**, see the rejection of claim **1** and note that Hashimoto further teaches an image processing method according to claim **1**, wherein the color balance

adjustment processing is performed for the entirety of the image (C7 L9-17 and note that the color balance of the whole image is adjusted based on different regions).

7. As to claim **4**, see the rejection of claim **1** and note that aside from the subject distance, Velazquez also teaches using the subject distance, which directly related to the lens focal distance ([0017], i.e. the distance from the focused plane to the lens) to determine the estimated face size based on whether the subject is in the near or far field ([0028]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have also used the lens focal distance in the calculation of claim **1** for the same reasons given in the rejection of claim **1**.

8. As to claim **5**, see the rejection of claim **1** and note that Hashimoto further teaches an image processing method according to claim **1**, wherein the performing includes: calculating a proportion of pixels (number Nf) that have a color close to a preset memory color (skin color, for example) by analyzing the image data (see C6 L56-67); and performing color balance adjustment processing using the proportion of the pixels (C7 L28-45).

9. As to claim **6**, see the rejection of claim **4** and note that in the combination of Hashimoto and Velazquez when the depth of field is far an estimated face size would be small and therefore a processing amount would be large if the amount of skin colored

portions is large as it is not likely to be a person so the color would need to be adjusted (C7 L9-17 of Hashimoto).

10. As to claim **8**, see the rejection of claim **1** and note that Hashimoto further teaches an image processing method according to claim **1**, wherein the method further comprises the steps of:

judging whether or not operating settings of the image producing device at the time of the production of the image data are suitably set for portrait images by analyzing the image production record information in cases where the image production record information includes shooting mode information relating to the operating settings (C6 L56-67, note that the count values correspond to record information and the saturation amount determines whether the device is suitably set for portrait images); and

performing the color balance adjustment processing of the image data in cases where the judgment is affirmative (note that this limitation does not preclude performing in cases where the judgment is negative, and therefore as Hashimoto performs color balance processing regardless of the count values it discloses this feature, see C7 L9-17).

11. Claim **9** is an apparatus that corresponds to the method of claim **1** and therefore is rejected on the same grounds but drawn to an apparatus.

12. Claim **10** is a computer program product that performs the steps of the method of claim **1** and therefore is rejected on the same grounds as the method of Hashimoto is carried out using a CPU 314 (see C5 L54-67) and therefore must inherently use a program to perform the method.

13. Claim **11** essentially is an output device for outputting image data processed by the method of claim **1** with an apparatus corresponding to claim **9** and therefore is rejected on the same grounds as claims **1** and **9** as Hashimoto discloses such an output device 306 (see Fig. 3 and note that video is outputted from 306).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571)272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dillon Durnford-Geszvain

/Tuan V Ho/  
Primary Examiner, Art Unit 2622